

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-350715

(43)Date of publication of application : 19.12.2000

(51)Int.Cl.

A61B 5/055
G01R 33/48

(21)Application number : 2000-152885 (71)Applicant : SIEMENS AG

(22)Date of filing : 24.05.2000 (72)Inventor : LAUB GERHARD

(30)Priority

Priority number : 99 19924448 Priority date : 28.05.1999 Priority country : DE

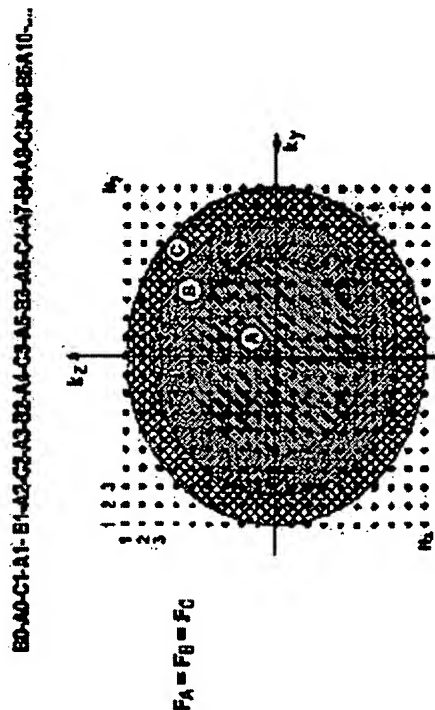
(54) METHOD FOR OBTAINING THREE-DIMENSIONAL RECORD TIME AND POSITION RESOLVED BY MAGNETIC RESONANCE AND APPARATUS FOR PRACTICING THIS METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To improve position and/or time resolution of measurement by deciding the time order so as to catch the central segments more frequently than the outside segments in k-shape for different combination of phase coding.

SOLUTION: The areas of segments A, B and C are all equal. The measurement order corresponding to individual segment is that the data for the center are measured with a frequency double the data for outside segment B and C. The symmetry of k-shape division better fits the object to be taken in the ring-form segmentation. For instance, when the object is a blood vessel with a longitudinal direction along the read-out gradient, the cross-section of the blood vessel positions

within both phase coding gradient planes. The cross-section of the blood vessel is described by a circular plane for the first approximation, and segmentation of the ring-form k-shape enables diffused state of diffused medium and practice of 3D measurement. Thus, an



optimum relation of time and position resolution is obtained.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office